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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,412	01/19/2000	PATRIK LJUNGSTROEM	RIEB3.001APC	2586

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EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
2686	16

DATE MAILED: 11/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

DR

Office Action Summary

Application No.

09/380,412

Applicant(s)

Patrik Ljungstrom et al.

Examiner

Naghmeh Mehrpour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-26 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 26**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Raffel et al. (US Patent Number 5,675,629) in view of Bacher et al. (US Patent Number 5,617,467).

Regarding **Claim 26**, Raffel teaches a system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (col 2 lines 25-35) comprising:

transmitting a specific identification periodically from the base station to indicate presence and readiness for operation during a stand by mode (col 7 lines 5-25), wherein sections of data of the first identification module of the base station, wherein sections of data of the first identification module used in the base station are identical to sections of data on a second identification module of an access-authorized mobile terminal (col 7 lines 25-37);

processing data read from the identification module through software implemented in the base station, so as to generate a first authentication result (mobile) (col 23 lines 55-63)

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Processing data read from the second identification module (base station), generated at the base station, so as to generate a second authentication result (col 15 lines 38-65),

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result(bas station), wherein the base station fulfills an access-authorized mobile terminal (col 30 lines 43-58); and software implemented in the base station for processing of data read from the identification module and for authenticating the mobile terminal relative to the base station through the processed data, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (col 25 lines 38-59) and, respectively, the authentication center of the mobile communication system. Raffel teaches a cordless system that works with cellular system, and the cellular system usually contains the HLR/VLR/AUC (Col 34 lines 61-66).

Raffel fails to mention that a read/write unit within a base station which configured to read and write information from and to. However, Becher teaches a read/write unit within a base station which is configured to read and write information from and to and processing data read from the identification module through software implemented in the base station (see figure 1, read/ write memory, col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, providing more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine above teaching of Bacher with Raffel

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cordless Base Station, in order to provide more flexibility for the wireless communication system.

3. **Claims 12-20, 22, 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Raffel et al. (US Patent Number 5,675,629) in view of Bacher et al. (US Patent Number 5,617,467), in further view of Yahagi (US Patent Number 5,642,401).

Regarding **Claims 12-13, 20**, Raffel teaches a cordless communication system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (col 2 lines 25-35) comprising:

at least one a **first** identification module (base station), wherein sections of data of the identification module through, wherein the section of the first identification module (mobile) used in the base station is identical to the section of a **second identification module (base station)** of an access-authorized mobile terminal (col 30 lines 43-58);

authenticating the mobile terminal with regard to the base station through the first authentication result and the second authentication result (col 30 lines 43-58);

wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (col 25 lines 38-59) and, respectively, the authentication center of the mobile communication system (col 7 lines 15-25). Raffel teaches

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a cordless system that works with cellular system, and the cellular system usually contains the HLR/VLR/AUC (Col 34 lines 61-66).

Raffel fails to mention that a read/write unit within a base station which configured to read and write information from and to and processing data read from the identification module through software implemented in the base station.

However Bacher teaches a read/write unit within a base station which configured to read and write information from and to and processing data read from the identification module through software implemented in the base station (col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Raffel cordless Base Station, in order to provide more flexibility for the wireless communication system.

The combination of Raffel and Bacher fails to teach **using a random number generated at the base station**, so as to generate the authentication result.

Yahagi teaches using a random number generated at the base station, so as to generate that authentication result (col 3 lines 60-67, col 4 lines 1-5, col 4 lines 26-35, col 5 lines 30-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Yahagi with the combination of Bacher and Raffel cordless Base Station, in order to provide authentication method which does not require any

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means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

Regarding **Claim 14**, Raffel teaches a method further comprising storing other data on the identification module and the other data including allowed frequencies, a maximum permitted output powers for the base station and the mobile terminal, allowed services, and initialization parameters which a network carrier desires to influence and which constitute a general framework for the operation of the base station of the cordless communication system (Col 23 line 60, col 24 line 15).

Regarding **Claims 15-16**, Raffel teaches a method comprising operating the base station of the cordless communication system so that the air interface operates in a frequency spectrum of a public mobile communication system (col 14 lines 9-11, lines 37-56, col 24 lines 7-8).

Regarding **Claims 17-19**, Raffel teaches a method of communication that comprise a timer within the base station to a predetermined time by a network carrier, and automatically resetting the timer by a subscriber if an authorized use occurs, wherein the base station, if not used after the predetermined time has lapsed, loses authorization to operate a transmitter at frequencies assigned to the mobile communication system (Col 7 lines 43-65).

Regarding **Claim 22**, the combination of Raffel, Bacher and Yahagi fails to teach a cordless communication system wherein the predetermined standard is selected from the group consisting of ISO ID-1, ID-000, DCS 1800, and PCS 1900. However Examiner takes official notice that a cordless communication system wherein the predetermined standard is selected from the group

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consisting of ISO ID-1, ID-000, DCS 1800, and PCS 1900 is well known in the art. Therefore, it have been obvious to one of ordinary skill in the art at the time of the invention to use above teaching to the combination of Raffel, Bacher and Yahagi, in order to provide a system that can be operational with in a variety of different networks.

Regarding **claim 25**, Raffel teaches a cordless communication system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (col 2 lines 25-35) comprising:

at least one a first identification module, wherein a secret key is stored on the first identification module and a second identification module of an access-authorized mobile terminal (col 30 lines 43-58);

authenticating the mobile terminal with regard to the base station through the first and the second authentication result such that the mobile terminal authenticates directly with the base station, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home location register and, respectively, and authentication center of the mobile communication system (col 25 lines 38-59), and

operating the mobile through the public fixed network if the authentication has been successful (see figures 1-2, col 30 lines 42-58).

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Raffel fails to teach reading and writing from and to, respectively, at least one a first identification module, through a read and write unit of the base station.

However Bacher teaches a read/write unit within a base station which configured to read and write information from and to and processing data read from the identification module through software implemented in the base station (col 5 lines 54-58). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Raffel cordless Base Station, in order to provide more flexibility for the wireless communication system.

The combination of Raffel and Bacher fails to teach using a random number generated at the base station, so as to generate a first authentication result, and processing data read from the second identification module, using the random number generated at the base station, so as to generate a second authentication result.

Yahagi teaches using a random number generated at the base station, so as to generate a first authentication result (col 3 lines 60-67, col 4 lines 1-5), and processing data read from the second identification module (mobile identification), using the random number generated at the base station, so as to generate a second authentication result (col 4 lines 26-35, col 5 lines 30-43), and

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Yahagi with the combination of Bacher and Raffel cordless Base Station, in order to provide authentication method which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

4. **Claims 21, 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Raffel et al. (US Patent Number 5,675,629) and Bacher et al. (US Patent Number 5,617,467), in view of Yahagi (US Patent Number 5,642,401) and further view of Parker (US Patent Number 6,167,271).

Regarding **Claim 21**, the combination of the Raffel, Bacher and Yahagi fails to teach a cordless communication system wherein the base station identification is a chip card configured for a predetermined standard. However Parker teaches that the wireless communication system wherein the identification module is a chip card configured for a predetermined standard (col 7 lines 30-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine above teaching of Parker with the combination of Raffel, Bacher and Yahagi, in order to provide authentication method for a single telephone system for both mobile and stationary subscribers, which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

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Regarding **Claims 23-24**, the combination of the Raffel, Bacher and Yahagi fails to teach an apparatus/method of a cordless communication system wherein the mobile identification module is a chip card. Parker teaches an apparatus/method of a cordless communication system wherein the identification module is a chip card (col 7 lines 30-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine above teaching of Parker with the combination of Raffel, Bacher and Yahagi, in order to provide authentication method for a single telephone system for both mobile and stationary subscribers, which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any responses to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308--6296, (for formal communications indented for entry)

Or:

(703) 308-6306, (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, Va., sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

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If attempt to reach the examiner are unsuccessful the examiner's supervisor, Marsha Banks-Harold be reached (703)305-4379.

NM

Oct 27, 2003

Marsha D Banks-Harold
MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600